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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/679,175

10/03/2003

Terry L. Miller

03-308

2301

60782

7590

10/23/2006

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EXAMINER

PHAM, MINH CHAU THI

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,175

Applicant(s)

MILLER ET AL.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gullett (5,846,416), in view of Carlson (5,833,853).

Gullett discloses a filter assembly (10) comprising a center support (40, col. 5, lines 39-45) having a filter head attachment (30) at one end, a bowl attachment (21) at an opposite end, and a plurality of radial openings (53) disposed on the center support (40) and being located between the two ends, and a filter element (50) mounted on the center support (40). Gullett further discloses connecting means (200, col. 4, lines 27-29, lines 38-40, col. 5, lines 14-18) for connecting or engaging the two attachments to the center support. Gullett also discloses a center support is threaded (see col. 2, lines 46-51, col. 3, lines 26-30 and lines 48-54, col. 6, lines 1-9), therefore, it is inherently understood that the threaded end of the center support would provide rotatable attachment to and detachment from a filter head or from a bowl. Gullett also discloses a method of servicing a filter comprising the steps of detaching the center support from the filter head, detaching the center support from the bowl, reattaching the center support to the bowl, and reattaching the center support to the filter head. It is inherently understood that once the filter element is removed from the center support, the filter element is cleaned or washed before being put back on the center support for servicing. Claims 1-9 and 11-14 differ from the disclosure of Gullett in that the filter assembly has a metallic screen filter element mounted around the center support. Carlson discloses a

layered of multiple metallic screen filter element (252, 254, 255 in Fig. 5, col. 4, line 62 through col. 5, line 18) mounted around a center support (250). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the filter element of Gullett by the metallic screen filter as taught by Carlson since it is well known in the art that mesh filter would prevent passage enlargement which may reduce the effectiveness of the filter element (see motivation in col. 5, lines 30-38).

Response to Amendment

Applicant's arguments filed on August 11, 2006 have been fully considered but they are not persuasive.

Applicant argues that the cited primary reference does not disclose the filter center support with "rotatable attachment to and detachment from a filter head", as amended and there is no "metallic screen filter element mounted around the center support". The Examiner respectfully disagrees. The cited primary reference Gullett clearly shows a center support is threaded (see col. 2, lines 46-51, col. 3, lines 26-30 and lines 48-54, col. 6, lines 1-9), therefore, it is inherently understood that the threaded end of the center support would provide rotatable attachment to and detachment from a filter head or from a bowl.

Regarding to the "metallic screen filter element", the Examiner now rejects claims 1-9 and 11-14 under the 103(a) rejection via the primary reference Gullett in combination with the secondary reference Carlson to show: Gullett discloses a filter assembly (10) comprising a center support (40, col. 5, lines 39-45) having a filter head

attachment (30) at one end, a bowl attachment (21) at an opposite end, and a plurality of radial openings (53) disposed on the center support (40) and being located between the two ends, and a filter element (50) mounted on the center support (40). Gullett further discloses connecting means (200, col. 4, lines 27-29, lines 38-40, col. 5, lines 14-18) for connecting or engaging the two attachments to the center support. Gullett also discloses a center support is threaded (see col. 2, lines 46-51, col. 3, lines 26-30 and lines 48-54, col. 6, lines 1-9), therefore, it is inherently understood that the threaded end of the center support would provide rotatable attachment to and detachment from a filter head or from a bowl, as claimed. Gullett also discloses a method of servicing a filter comprising the steps of detaching the center support from the filter head, detaching the center support from the bowl, reattaching the center support to the bowl, and reattaching the center support to the filter head. It is inherently understood that once the filter element is removed from the center support, the filter element is cleaned or washed before being put back on the center support for servicing, as claimed.

Claims 1-9 and 11-14 differ from the disclosure of Gullett in that the filter assembly has a metallic screen filter element mounted around the center support. Carlson discloses a layered of multiple metallic screen filter element (252, 254, 255 in Fig. 5, col. 4, line 62 through col. 5, line 18) mounted around a center support (250), as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the filter element of Gullett by the metallic screen filter as taught by Carlson since it is well known in the art that mesh filter would

prevent passage enlargement which may reduce the effectiveness of the filter element (see motivation in col. 5, lines 30-38).

Applicant's arguments with respect to claims 1-9 and 11-14 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

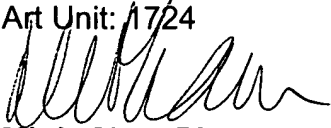
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Minh-Chau Pham', written in a cursive style.

Minh-Chau Pham

Patent Examiner

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October 17, 2006